

## DHV – Duckweed Permanently Flooded Herbaceous Vegetation (Map Unit 23)



Photo credit: Jim Von Loh



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The Duckweed Permanently Flooded Herbaceous Vegetation (DHV, Map Unit 23) represents a combination of the *Lemna* spp. (Duckweed) Permanently Flooded Herbaceous Vegetation Park Special and the *Myriophyllum sibiricum* (Water Milfoil) Herbaceous Vegetation Park Special.

Both the Duckweed Permanently Flooded Herbaceous Vegetation Park Special and the Water Milfoil Herbaceous Vegetation Park Special occupy historic small livestock watering ponds that are formed behind dams constructed of gravel. They are located on Grape and Boulder creeks and their tributary drainages, and occur at the lowest elevations. Many of the dams are oversized for the drainages they occupy, and have a culvert or outlet gate to control water depth. Along Grape Creek, west of the Hornbek Homestead, beaver have constructed many dams and ponds. The deeper, standing water provides habitat for both rooted and floating aquatic vegetation. A few ponds become dry during the course of the summer season and may exist as barren flats, or may vegetate to a *Hordeum jubatum* herbaceous type.

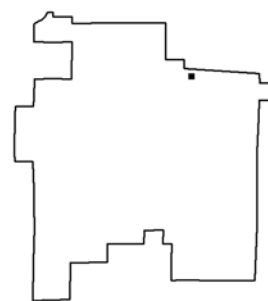
## DHV – Duckweed Permanently Flooded Herbaceous Vegetation (Map Unit 23) Continued

### Photo Signatures

These two associations are difficult to distinguish from one another. In the natural color aerial photography, the open water appears as dark gray-green to almost black, and the floating vegetation, if present, appears as light green. In color infrared aerial photography, the open water appears as very dark blue to black, and there is no visible floating vegetation. In both types of photography, the water and vegetation have an extremely smooth texture. The pond's shape often has a straight edge along the side facing the dam and the remainder conforms to the depression and drainage. They are typically less than 200 square meters. The shoreline vegetation consists of emergent wetland species with 90-100% foliar cover. Photo DHV-1 (natural color) was taken in September 1996 and DHV-2 (color infrared) was taken in August 1983. Both photos are of the same location and show a pond with little floating vegetation. DHV-3 (natural color) was taken in September 1996 and shows a pond with a large amount of floating vegetation forming a ring around its edge.



Photo DHV-1



Location of **DHV-1** within  
National Monument

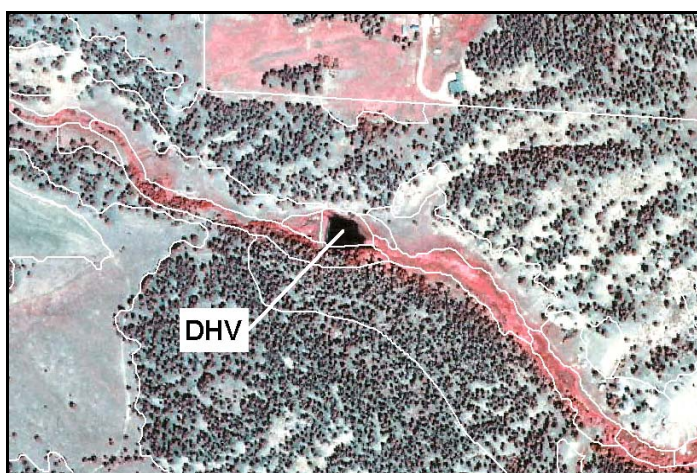
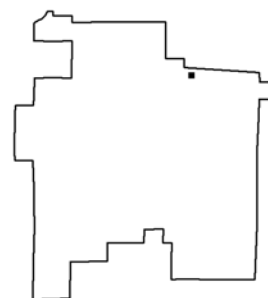
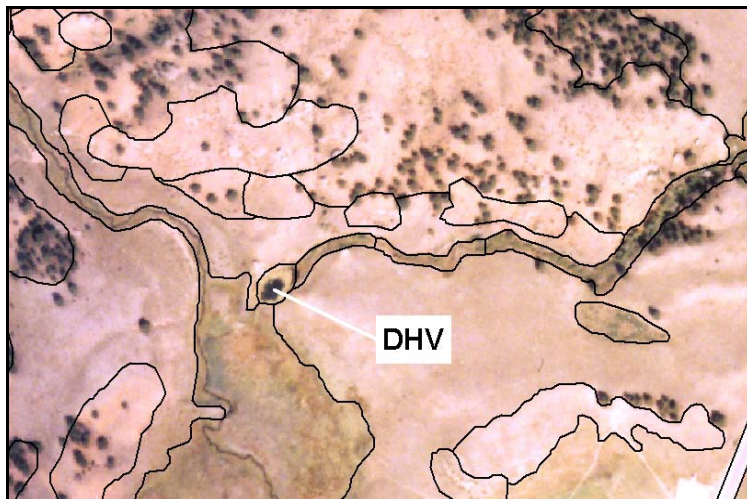


Photo DHV-2

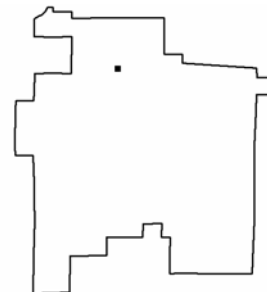


Location of **DHV-2** within  
National Monument

## DHV – Duckweed Permanently Flooded Herbaceous Vegetation (Map Unit 23) Continued



**Photo DHV-3**



Location of **DHV-3** within  
National Monument

### **Area Report for DHV Map Unit**

Number of Polygons: 10

Number of Hectares: 2.0

Number of Acres: 4.9

Average Size: 0.2 hectares, 0.5 acres

### **Accuracy Assessment Results for DHV Map Unit**

The Duckweed Permanently Flooded Herbaceous Vegetation Map Unit was assessed at 100% for producers' accuracy and at 71% users' accuracy.